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|-------------------------------|------------------------|---------------------|--|
| <b>Notice of Allowability</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                               | 10/815,483             | TRIMBERGER ET AL.   |  |
|                               | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                               | Phallaka Kik           | 2825                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 12/18/2006.
2. ☒ The allowed claim(s) is/are 1,3-6,20,22-30,46-47, wherein claims 2,7-19,21,31-45 have been cancelled and claims 3,46-47,4-6,20,22-30 have been renumbered as 2-17 respectively.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 5. <input type="checkbox"/> Notice of Informal Patent Application                      |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|  | 9. <input type="checkbox"/> Other _____.   |

### **DETAILED ACTION**

1. This Office Action responds to the Applicant's amendment filed on 12/18/2006. Claims 1,3-20,22-47 are pending, wherein claims 2 and 21 have been cancelled, claims 7-19,31-45 have been withdrawn as being directed to non-elected inventions without traverse, claims 1,3,5-6,20,22,25-26 have been amended, and claims 46-47 have been newly added. Claims 1,3-6,20,22-30,46-47 have examined and are allowed, wherein claims 7-19,31-45 are subjected to the following Examiner's amendment.

#### ***Election/Restrictions***

2. This application is in condition for allowance except for the presence of claims 7-19,31-45 directed to inventions non-elected without traverse. Accordingly, claims 7-19,31-45 have been cancelled as given in the Examiner's Amendment below.

### **EXAMINER'S AMENDMENT**

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

The application has been amended as follows:

#### **In the claims:**

As per **claims 7-19,31-45**, the claims have been cancelled has being directed to non-elected inventions without traverse.

#### **In the specification:**

The specification has been amended to update the status of the referenced applications:

--, now U.S. Patent No. 7,007,250, -- has been inserted after "10/388,000" (line 3, paragraph [0001]).

--, now U.S. Patent No. 6,817,006, -- has been inserted after "10/104,324" (line 6, paragraph [0001]).

***Allowable Subject Matter***

4. **Claims 1,3-6,20,22-30,46-47** are allowed.

5. The following is an examiner's statement of reasons for allowance:

As per **claims 1,3-6,20,22-30,46-47**, the independent claims 1 and 20, from which the respective claims depend, recite the method of testing a programmable logic device to determine whether the programmable logic device is functional when configured to instantiate a circuit design expressed in a design database, comprising the inventive steps of testing of one or more of the instantiated signal paths and instantiated alternative signal path which includes configuring one of the logic clocks as a test-signal generator, issuing a test signal from the configured logic block, and transmitting the test signal through the signal path, in combination with the steps of identifying, instantiating the signal paths, testing the instantiated signal paths, correlating, instantiating the alternative signal path, and testing the instantiated alternative signal path, as claimed, which the prior arts made of record failed to teach or suggest. As pointed out by Applicant, **Wells et al.** (US Patent Application Publication No. 2004/0216081) has been disqualified as prior art under 35 USC 103(c).

Furthermore, although **Rohrbaugh et al.** (US Patent No. 7,139,955, especially col. 2, line 35 to col. 3, line 6; col. 13, lines 5-15) teach the automatic test pattern generation (ATPG) that can be implemented on programmable logic device (i.e., FPGA), such ATPG is NOT disclosed or suggested in the context of testing the programmable logic device involving the combination of steps as claimed, so as to make it obvious for one of ordinary skilled in the art at the time of the invention to combine the teachings of the prior art to arrive at Applicant's claimed invention. Accordingly, the claimed invention is novel and un-obvious over the prior arts made of record.

### ***Conclusion***

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phallaka Kik whose telephone number is 571-272-1895. The examiner can normally be reached on Monday-Friday, 8AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Chiang can be reached on 571-272-7483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**Any response to this action should be mailed to:**

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

**or faxed to:**

571-273-8300



Phallaka Kik  
Primary Examiner  
December 22, 2006